

# **The Political Economy of State Health Expenditure in India**

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## **Abstract**

This paper investigates the impact of between and within-state variation in indicators of the quality of democracy on state health spending and infant mortality in India, contributing to a rapidly growing literature on the effects of political institutions on social expenditure and welfare outcomes. State-level panel data including political variables, health expenditure, net domestic product, inequality and rainfall is matched to individual cohort data on almost 200000 births in 1970-1998 across the fifteen major Indian states. We first investigate whether the level of health expenditure in a state reacts to innovations in infant mortality (a direct effect), and whether the size of this reaction is greater when the political marketplace functions better (an interaction effect). We also allow for direct effects of the political variables on health expenditure. Infant mortality is instrumented with rainfall shocks, and the model includes state and year fixed effects and state-specific trends. In this way, under some restrictions, we avoid the problem that changes in the political landscape are determined simultaneously with (conditional) changes in health expenditure. We find that the political variables have no significant effect on health expenditure, whether directly or in interaction with mortality shocks. In the second leg of the analysis, the dependent variable is infant mortality. Having found no effect of the political variables on the level of expenditure, we investigate whether they have an effect on the effectiveness of health expenditure in reducing mortality. For generality, we also allow direct effects of the political variables on mortality. It emerges that health expenditure has no contemporaneous effect on infant mortality in India although, for rural households, there is a significant effect of the third lag of expenditure. The interactions in this model therefore involve the third lag and note that political variables are all naturally lagged to the previous election. Strikingly, we find no political effects again. The results suggest that either the median voter does not care sufficiently about infant mortality or relating infant mortality to political performance

faces particularly severe information problems. It does not seem plausible that the median voter does not care about infant mortality or primary education, even if this is not inconceivable given the degree of social stratification in Indian society. If salience issues are not key, then the results suggest that the incentives facing political actors are not such as to favour the regular provision of broad-based public services. This is consistent with their reacting to big isolated shocks like floods that claim media attention, with public investment in infrastructure projects that favour targeted groups of voters, or with identity-based voting which leads to its own form of targeting. However, we cannot rule out the possibility that, with the data at hand, we simply do not have sufficient variation to identify within-state changes in political variables that occur, on average, at five-yearly intervals in a time-span of just less than thirty years. We extracted the estimated state dummy coefficients from the model and regressed these upon averages over the period of the political variables. In this simple cross-sectional regression, we find large and significant effects of the political variables on both health expenditure and infant mortality. It seems therefore that long-standing differences in political culture across the Indian states are pertinent to health outcomes, even if annual within state variations in political functioning are not.